

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended): ~~Process~~ A process for obtaining mature dendritic cells or activated macrophages from monocytes, monocyte precursors or hematopoietic stem cells, ~~characterized in that the~~ comprising: contacting said monocytes, monocyte precursors or hematopoietic stem cells ~~are placed in contact~~ with RU41470 or an analogue ~~thereof of the~~ wherein said RU41470 or ~~latter, this compound being selected such that the placing in contact of~~ analogue thereof when placed in contact with immature dendritic cells ~~with the said compound~~ induces the functional maturation of the dendritic cells, ~~demonstrated by their~~ capacity

- ~~to trigger~~ triggering a primary response *in vitro* against an infectious or tumor antigen placed in contact with the dendritic cells beforehand and/or during their culture with the T lymphocytes; and
- ~~to induce~~ inducing the proliferation of T lymphocytes in a mixed autologous culture or a mixed allogenic culture.

2. (Currently Amended): ~~Process~~ A process for obtaining mature dendritic cells or activated macrophages from monocytes, monocyte precursors or hematopoietic stem cells, ~~characterized in that the~~ comprising contacting said monocytes, monocyte precursors or hematopoietic stem cells ~~are placed in contact~~ with RU 41470 or an analogue ~~thereof of the latter,~~ wherein said RU41470 or ~~this compound being selected such that the placing in contact of~~ analogue thereof when placed in contact with immature dendritic cells ~~with the said compound~~ induces a phenotypic maturation of the dendritic cells, ~~demonstrated by a~~ significant increase in increasing the expression of the molecules CD40, CD83, CD86 and HLA-DR and ~~a very marked diminution in~~ decreasing the expression of the molecules CD14 and CD1a ~~by the said dendritic cells.~~

3. (Currently Amended): ~~Process~~ The process according to claim 1 ~~or 2~~, ~~characterized in that the monocytes, precursors or stem cells are placed in contact with an~~ wherein said analogue of RU 41740 is obtained from the strain 0₁K₂NCTC 5055 of *Klebsiella pneumoniae*.

4. (Currently Amended): ~~Process~~ A process for obtaining mature dendritic cells presenting selected antigens, starting from monocytes, monocyte precursors or hematopoietic stem cells, ~~characterized in that the said precursors are placed in contact~~ comprising contacting said monocytes, monocyte precursors or hematopoietic stem cells with RU 41740 or an analogue thereof, coupled to molecules comprising the said selected antigens.

5. (Currently Amended): ~~Process~~ The process according to Claim 4, ~~characterized in that~~ wherein the coupling between RU 41740 or its analogue thereof and the molecules comprising said antigens is non-covalent.

6. (Currently Amended): ~~Process~~ The process according to ~~one of the claims 1, 2, 4 and 5~~ Claim 1, ~~in which the compound~~ wherein RU 41740 or RU41740 coupled to antigenic molecules is placed in contact with the monocytes, monocyte precursors or hematopoietic stem cells ~~is RU 41740, coupled or not to antigenic molecules.~~

7. (Currently Amended): ~~Process~~ The process according to Claim 6, ~~in which~~ wherein RU 41740 is added to the culture medium of the monocytes, monocyte precursors or hematopoietic stem cells at a final concentration ~~comprised~~ between 1 ng/ml and 1 mg/ml, ~~preferentially between 100 ng/ml and 10 µg/ml.~~

8. (Currently Amended): ~~Process~~ The process according to Claim 3, ~~characterized in~~ wherein the analogue of RU 41740 is LCOS 1013 or LCOS 1014.

9. (Currently Amended): ~~Process~~ The process according to Claim 8, in which LCOS 1013 or LCOS 1014 is added to the culture medium of the monocytes, monocyte precursors or

hematopoietic stem cells at a final concentration ~~comprised~~ between 1 ng/ml and 1 mg/ml; preferentially between 100 ng/ml and 50 µg/ml.

10. (Currently Amended): ~~Process~~ The process according to ~~one of the Claims 1 to 9~~ Claim 1, in which further comprising treating the dendritic cells ~~are treated *ex vivo* for the preparation of a medicine destined for the prophylaxis, attenuation or treatment of cancerous, infectious, allergic or auto-immune diseases.~~

11.-17. (Canceled)

18. (Currently Amended): ~~Coupling product between~~ A composition comprising RU 41740 or an analogue thereof ~~and coupled to~~ antigenic molecules ~~for inducing the maturation of dendritic cells or the activation of macrophages.~~

19. (Currently Amended): ~~Coupling product~~ The composition according to claim 18 ~~characterized in that wherein~~ RU 41740 or its analogue is ~~linked~~ coupled to said antigenic molecules by ~~means of~~ non-covalent bonds.

20. (Currently Amended): ~~Coupling product~~ The composition according to Claim 18 or 19, ~~characterized in that the wherein~~ said antigenic molecules are non-protein in nature.

21. (New) The process according to Claim 7, wherein RU 41740 is added to the culture medium of the monocytes, monocyte precursors or hematopoietic stem cells at a final concentration between 100 ng/ml and 10 µg/ml.

22. (New) The process according to Claim 9, in which LCOS 1013 or LCOS 1014 is added to the culture medium of the monocytes, monocyte precursors or hematopoietic stem cells at a final concentration between 100 ng/ml and 50 µg/ml.

23. (New) A process for producing a composition which modifies an immune response comprising:

incubating mature dendritic cells obtained by the process of Claim 1 in the presence of an immunosuppressant to obtain a composition which modifies an immune response.

24. (New) A process for producing a composition which modifies an immune response comprising:

incubating mature dendritic cells obtained by the process of Claim 2 in the presence of an immunosuppressant a composition which modifies an immune response.

25. (New) The process according to Claim 24, wherein said immunosuppressant is cyclosporine or histamine.

26. (New) A process for obtaining a composition that can detect and/or characterize histocompatibility antigens comprising:

- a) obtaining mature dendritic cells using the process of Claim 1; and
- b) adding said mature dendritic cells to a mixed lymphocyte culture reaction to obtain said composition.

27. (New) A process for obtaining a composition that can detect and/or characterize histocompatibility antigens comprising:

- c) obtaining mature dendritic cells using the process of Claim 2; and
- d) adding said mature dendritic cells to a mixed lymphocyte culture reaction to obtain said composition.

28. (New) A process for inducing *in vitro* the maturation of Langerhans cells comprising:

topically administering mature dendritic cells obtained by the process of Claim 1.

29. (New) A process for inducing *in vitro* the maturation of Langerhans cells comprising:

topically administering mature dendritic cells obtained by the process of Claim 2.

30. (New) A process for producing T lymphocytic clones directed against a peptide comprising:

- a) culturing dendritic cells derived from monocytes in the presence of GM-CSF, IL-4 and RU41740 or an analogue of RU 41740;
- b) incubating said culture of a) with a peptide; and
- c) adding said culture of b) to autologous T lymphocytes to produce T lymphocytes specific for said peptide.

31. (New) The process of Claim 30, wherein said peptide is thyrocalcitonin.

32. (New) A process to generate an anatoxin cytotoxic line comprising:

- a) culturing dendritic cells derived from human monocytes in the presence of GM-CSF, IL-4 and RU41470 an analogue of RU 41740; and
- b) coupling an anatoxin antigen responsible for infection against a microorganism to said dendritic cells obtained in a) to generate an anatoxin cytotoxin line.